



DISPLAYS NEWS

CANON AND TOSHIBA JOIN FORCES FOR SEDS

Canon is teaming up with Toshiba in a £900 million venture to produce a new generation of flat-panel displays that use surface-conduction electron-emitter display (SED) technology. Canon is to invest a further £100 million in a new research facility. Meanwhile, Toshiba is dropping all plasma TV production.



SED technology produces large, high-resolution flat panels that are light, thin and consume little power. The SED consists of two glass plates, one mounted with electron emitters and the other coated with a fluorescent substance, with a vacuum between. Applying a voltage causes the emission of electrons. Some are accelerated by the voltage between the glass plates and collide with the fluorescent-coated glass, making it emit light. Larger screens may also be produced by increasing the number of electron emitters.

This spontaneous light display is similar to a cathode ray tube (CRT); it maintains levels of brightness and colour and a wide angle of visibility that's said to be on a par with a CRT.

The first 50" screens will appear next year, but mass production will not begin until 2007.

REVIEW 31.5" LCD TV

ACER AT3201W

RATING ★★★★★

PRICE £785 inc VAT

SUPPLIER www.digiuk.com, 01386 556633

DETAILS www.acer.com



Acer's 26" LCD TV won five stars and a Best Budget Buy award in *Shopper* June 2005. The company has now released a 31½" model that is big enough for home cinema use but priced for a budget market.

High definition (HD) is this screen's key strength, with its 1,366x768 resolution. It provides every input you could want: it has eight video inputs, for example, and we were particularly impressed by the D-sub and DVI inputs, which allow the screen to display any PC or HD content. Standard-definition inputs include a pair of SCART sockets and component and S-video interfaces.

Picture quality with the HD video is simply stunning, easily equalling that of more expensive displays. We used HD DivX and WMV files, and their charms drew a mesmerised crowd. Playing DVDs from the test PC also produced great results, with the DVD software carrying out image scaling. Picture quality from other inputs was less impressive, however, showing up faults in the TV's scaling electronics. We tested this with a DVD of *Spider-Man 2* and found that the poor scaling caused significant artefacts in the image. This problem was consistent across all the inputs.

The speakers are loud enough to fill a fair-sized living room without distortion. They are fine for watching TV, but for movies you'll probably want a surround sound setup instead. Fortunately, the



speakers can be removed, making the screen slimmer and more attractive.

Most content will be going over to HD in the not-too-distant future, and this display's shortcomings with standard signals will be a distant memory. Meanwhile, you can bypass the screen's electronics by using a media PC or an upscaling DVD player such as Samsung's HD850. If you need to buy a new TV now but you want to be ready for tomorrow, the AT3201W certainly won't bankrupt you in the process.

Seth Barton



Great value; decent sound; HD-ready



Artefacts on DVD playback

SPECIFICATIONS 31½" image, 1,366x768 native resolution, D-sub, DVI (with HDCP), 2x SCART, composite, S-video, 3x phono and RF inputs, headphone out, 2x 10W speakers. **Part code** EV.M0307.001

HOTLIST 17" LCD MONITOR

RELISYS TL795-RU

RATING ★★★★★

PRICE £159 inc VAT

SUPPLIER www.savastore.com

DETAILS www.relisys.co.uk



The TL795-RU looks very smart and unobtrusive, with neat desk-level D-sub and DVI inputs. Image quality is well above average with exceptionally smooth greyscales and accurate colour reproduction. It isn't as bright as some LCDs, but this didn't concern us overly. There are no other weaknesses, making this the best monitor for a tight budget.



SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI and line inputs, headphone out, speakers. **Part code** TL795-RU

HOTLIST 19" LCD MONITOR

SAMSUNG SM913N

RATING ★★★★★

PRICE £204 inc VAT

SUPPLIER www.morecomputers.co.uk

DETAILS www.samsung.co.uk

The SM913N's simple design and thin bezel are attractive and its image quality is excellent, with impeccable focus and smooth linear greyscales. Colour accuracy is superb, with the ability to resolve subtle details in images. The SM913N has a low price along with excellent image quality and a pleasing design, and fully deserves our Best Buy Award.



SPECIFICATIONS 1,280x1,024 native resolution, D-sub input. **Part code** MJ19ESKSB

HOTLIST 20" LCD MONITOR

ACER AL2021MS

RATING ★★★★★

PRICE £412 inc VAT

SUPPLIER www.technoworld.com

DETAILS www.acer.co.uk



Acer's AL2021MS is amazingly affordable for a 20" LCD. We were bowled over by its image quality: its white was bright and pure, focus was spot on and viewing angles were exceptionally good. Photos displayed subtle details and good skin tone accuracy. The 25ms response time made games look slightly sluggish, but such high quality at this price makes it perfect for photo editing.



SPECIFICATIONS 1,600x1,200 native resolution, D-sub and DVI inputs, speakers. **Part code** AL2021MS

REVIEW 17" LCD TV

LG L173ST

RATING ★★★★★

PRICE £251 inc VAT

SUPPLIER www.savastore.com, 08700 270900

DETAILS <http://uk.lge.com>

Media centres and high-definition (HD) displays are bringing computers and television closer together than ever, but they are still expensive. If you need a computer monitor but also want to watch TV on it, a simple multifunction display such as this one from LG may be what you are looking for.

Extra inputs differentiate LG's L173ST from a standard LCD monitor. It has the usual D-sub and DVI inputs for your PC, although no DVI cable is provided. It also has composite, S-video and SCART for video devices. The SCART input is particularly useful for connecting Freeview set-top boxes and DVD players. Finally, there's an RF input for the analogue TV signal.

Setting up the TV channels was easy. We activated the auto search function in the menu and found all the analogue channels. We had to delete a few duplicate channels and reorder the rest to our liking, but this was easy. Picture quality was acceptable, and although there is persistent noise, you soon stop noticing it.

Watching DVDs through the SCART socket revealed more serious issues, however. The picture quality is certainly not appalling, but noise is still present and we noticed jagged edges on moving objects. Also, watching widescreen movies on a 17" monitor gives the minimum of viewing space, so this screen is not recommended for movie fans.



The speakers are loud, clear and easily powerful enough for the size of the screen. The viewing angles are acceptable, but beyond 45° the colours begin to change hue. The remote is well laid out, but the buttons are spongy and unresponsive. The menus make up for this by being clear and concise.

Performance as a computer monitor was decent, passing all our normal tests with aplomb. Whites were bright and clean, and text was crisp and legible. Its appearance has split opinion here, but it is satisfyingly solid.

This monitor offers a lot of extra features compared with our Hotlist 17" Relisys monitor on the opposite page. If you want a monitor for watching analogue TV, this is a decent example, but anyone who can receive digital broadcasts should consider buying a TV card instead.

Seth Barton
☒ Loads of inputs; cheap

☐ Analogue channels only; average RGB performance

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, SCART, RF, S-video, composite, phono inputs, line in, mic in, headphone out, mic out. **Part code** L173ST

CHOOSING AN...

LCD MONITOR



Follow our simple step-by-step guide to buying the perfect LCD

1 LCD screens (also known as TFTs) offer a range of benefits over conventional CRT models, including compact designs and sharp, straight images. However, LCD technology also has its disadvantages. Image quality can deteriorate at acute viewing angles, while the picture can appear fuzzy at resolutions below the native one. LCDs sometimes suffer from defective or 'dead' pixels.



2 A basic 17" LCD monitor (one with the specification shown in grey below) costs from £150, although similarly specified screens can cost as much as £250. The best models avoid the pitfalls mentioned above.

3 All 17" LCD screens have a native resolution of 1,280x1,024 pixels, which is fine for most applications. If you want a larger viewing area – useful for creative software – a 19" LCD is necessary. These start at around £180, but you'll need to spend £400 to get a 20" model with a 1,600x1,200 resolution. For games or DVDs, you should look for a response time of 16ms or less to prevent smearing or moving objects. DVDs will also benefit from a widescreen.

4 A video graphics array (VGA) input means the display will work with any PC, but a digital video interface (DVI) input removes unnecessary digital-to-analogue conversion of the picture, potentially improving sharpness and colour accuracy while eliminating interference. A DVI-equipped graphics card is required to use this.

5 Extras may include a USB hub, speakers, a microphone and even a TV tuner, which allows the display to double as a standalone TV.

FILL IN YOUR SPECS HERE

(Recommended minimum in grey)

IMAGE SIZE: 17"
NATIVE RESOLUTION: 1,280x1,024
RESPONSE TIME: 25ms
INPUTS: VGA
EXTRAS:

HOTLIST LCD TV

ACER AL2671W

RATING ★★★★★

PRICE £563 inc VAT

SUPPLIER www.dabs.com
DETAILS www.acer.com


The Acer AL2671W has the stylish look of a flat TV, but without the expense or hassle of a full home cinema setup. It has plenty of inputs, including DVI, and a 1,280x768 resolution making it ideal for upcoming HD content. Image quality is great, and the excellent sound is provided by pseudo-surround speakers. Home cinema fans should look elsewhere, but otherwise this is a real bargain.



SPECIFICATIONS 26" image, 1,280x768 native resolution, D-sub, DVI, two SCART and RF inputs, two 5W speakers. **Part code** EV.M0107.009

HOTLIST LCD PROJECTOR

PANASONIC PT-AE700

RATING ★★★★★

PRICE £971 inc VAT and delivery

SUPPLIER www.pixmania.co.uk
DETAILS www.panasonic.co.uk

The PT-AE700 is a home cinema projector and its native 16:9 widescreen ratio is ideal for DVD, gaming and digital TV. Every connector is provided including component, SCART and HDMI, so you can enjoy a wide range of media with excellent image clarity. It is also one of the quietest projectors we've used. Bulb life is up to 4,000 hours in low lamp mode, though this requires a fully darkened room.

SPECIFICATIONS Three 0.7" LCDs, 1,280x720 resolution, 1,000 lumens, 2000:1 contrast ratio. **Part code** PTAE700EC

